

IN THE CLAIMS

1. (Currently Amended) ~~Vaccine~~ A vaccine composition containing proteolipidic cochlear structures obtained from vesicles found in the outer membranes of live microorganisms, ~~and optionally supplemented by one or more antigens, as well as an adequate excipient.~~
2. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 1, with said cochlear structures comprised of proteins, lipids and molecular structures associated to pathogens.
3. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 2, with said molecular structures associated to pathogens added at a concentration between 1 % and 30 % of the protein weight of the cochlear structure.
4. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 3, with said molecular structures associated to pathogens selected from the group consisting in lipopolysaccharides, peptidoglycan, lipoprotein, teichoic acid, flagellin and lipophosphoglycane.
5. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 1, characterized by the fact that the live organism supplying the vesicles of outer membrane is comprising a bacterial, protozoan or animal cell organism.

6. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 5, characterized by the fact that said bacterium ~~can be~~ is one of Gram negative or Gram positive.

7. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 6, characterized by the fact that said Gram negative bacterium ~~can be~~ comprises one of the Neisseria, Haemophilus, Salmonella, Vibrio, Pseudomona or Shigella genus.

8. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 6, characterized by the fact that said Gram positive bacterium may be of the Streptococcus or Staphylococcus genus.

9. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 5, characterized by the fact that said live organism is the protozoo of the Lishmania genus.

10. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 5, characterized by the fact that the cochlear structures are extracted from a tumor cell.

11. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 4 ~~51~~, with wherein the antigens additionally included ~~found at~~ are in a ratio with the proteins present in the cochlear structure of 0.2 to 2.7 μg to 3 to 9 μg of protein.

12. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim ~~451~~, with wherein the antigens ~~to be additionally included~~ are selected from the group consisting in: natural or recombining proteins, peptides, saccharides, nucleic acids, conjugates or allergens.

13. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 12, with wherein the ~~added antigen being~~ is a protein from the hepatitis C virus.

14. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 12, with wherein the ~~added antigen being~~ is the recombining protein P1 from papillomavirus.

15. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 12, with wherein the ~~added antigen being~~ is the epitope T or B.

16. (Currently Amended) ~~Vaccine~~ A vaccine adjuvant containing proteolipidic cochlear structures obtained from vesicles found in the outer membranes of live organisms.

17. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 16, ~~with wherein said cochlear structures composed of~~ comprise proteins, lipids, and molecular structures associated to pathogens.

18. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 17, ~~with wherein said molecular structures associated to pathogens~~ are found at a concentration between 1 % and 30 % of the protein weight of the structure.

19. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 17, ~~with wherein said molecular structures associated to pathogens selected from the group consisting in~~ of lipopolysaccharide, peptidoglycan, lipoprotein, teichoic acid, flagellin and lipophosphoglycan.

20. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 16, ~~characterized by the fact that wherein the live organism supplying the vesicles of outer membrane used to form the cochlear structures is a bacterium, a protozoan or an animal cell.~~

21. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 20, characterized by the fact that wherein said bacterium is a Gram negative or a Gram positive.

22. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 21, characterized by the fact that wherein said Gram negative bacterium is one of Neisseria, Haemophilus, Salmonella, Vibrio, Pseudomona or Shigella genus.

23. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 21, characterized by the fact that wherein said Gram positive bacterium is one of the Streptococcus or Staphylococcus genus.

24. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 20, characterized by the fact that said live organism is a protozoan organism from the Leishmania genus.

25. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 20, with the said cochlear structures being derived from a tumor cell.

26. (Currently Amended) ~~Vaccine~~ A vaccine composition containing vesicles obtained from the outer membrane of live organisms and, optionally, one or more antigens, as well as an adequate excipient.

27. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 26, with said outer membrane vesicles ~~composed of~~ comprising proteins, lipids and molecular structures associated to pathogens.

28. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 27, with said molecular structures associated to pathogens ~~found at~~ are in a concentration between 1 % and 7 % of the protein weight of the structure.

29. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 27, with said molecular structures associated to pathogens being selected from the group consisting ~~in~~ of lipopolysaccharide, peptidoglycane, teichoic acid, flagellin and lipophosphoglycane.

30. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 26, characterized by ~~the fact that~~ the live organism supplying the vesicles of outer membrane used to form the cochlear structures is a bacterium, a protozoan or an animal cell.

31. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 30, characterized by ~~the fact that~~ said bacterium is a Gram negative or a Gram positive.

32. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 31, ~~characterized by the fact that said Gram negative bacterium is one of~~ Neisseria, Haemophilus, Salmonella, Vibrio, Pseudomona or Shigella genus.

33. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 31, characterized by the fact that said Gram positive bacterium is one of the Streptococcus or Staphylococcus genus.

34. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 30, ~~characterized by the fact that said live organism is a protozoan organism~~ from the Leishmania genus.

35. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claim 30, with the outer membrane vesicles derived from a tumor cell.

36. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant containing vesicles extracted from the outer membrane of live organisms.

37. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 36 with said outer membrane vesicles ~~composed of~~ comprising proteins, lipids, and molecular structures associated to pathogens.

38. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 37, with said molecular structures associated to pathogens ~~found at~~ are in a concentration between 1 % and 7 % of the protein weight of the structure.

39. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 37, with said molecular structures associated to pathogens being selected from the group consisting ~~in~~ of lipopolysaccharide, peptidoglycane, teichoic acid, flagellin and lipophosphoglycane.

40. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 36, characterized by the fact that the live organism supplying the vesicles of outer membrane used to form the cochlear structures is a bacterium, a protozoan or an animal cell.

41. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 40, ~~characterized by the fact that~~ said bacterium is a Gram negative or a Gram positive.

42. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 41, ~~characterized by the fact that~~ said Gram negative bacterium is one of Neisseria, Haemophilus, Salmonella, Vibrio, Pseudomonas or Shigella genus.

43. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 41, characterized by the fact that said Gram positive bacterium is one of the Streptococcus or Staphylococcus genus.

44. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 40, characterized by the fact that said live organism is a protozoan from the Leishmania genus.

45. (Currently Amended) ~~Vaccine~~ The vaccine adjuvant according to Claim 40, with the outer membrane vesicles being derived from a tumor cell.

46. (Currently Amended) A method for obtaining cochlear structures from vesicles found in the outer membrane of live organisms, ~~composed of~~ comprising the following steps:

(a) ~~Preparation~~ preparing from outer membrane vesicles, of a solution with a total protein concentration between 3 and 6 mg/mL, ~~to which~~ and adding a non-ionic detergent is added at a concentration 10 times that of the proteins;

(b) ~~Should one wish to incorporate other antigens of interest or molecular structures associated to pathogens, these are added to the solution~~

~~prepared in a), homogenizing it at 0.2 to 2.7 μ g for each 3 to 9 μ g of protein for the antigens and from 1 to 30 % of the protein concentration for the molecular structures.~~

~~(c) (b) Following this, the solution of steps a) and b) is filtered~~ filtering
through a membrane with a pore size of 0.2 μ m, with the aim of sterilizing and eliminating vesicle aggregates; ~~yet found in it.~~

~~(d)(c) A~~ executing a rotational dialysis or a tangential filtration ~~is then executed,~~ against a solution containing concentrations of a multivalent ion, particularly Ca^{2+} , Zn^{2+} , or Mg^{2+} , between 2.5 and 6.5 mM, at conditions buffered at $\text{pH } 7.4 \pm 0.2$; and

~~(e)(d) Finally, mechanically treating the resultant cochlear structures obtained are mechanically treated, submitted, especially, to sonication in a water bath at a temperature between 15°C and 25°C for a period of 45 minutes, in order to homogenize the size of the particles.~~

47. (Currently Amended) ~~Vaccine~~ The vaccine composition according to Claims 1 to 15 Claim 1, administered wherein the composition is administrable mucosally, parenterally, or through a combination of both methods.

48. (Currently Amended) ~~Vaccine~~ The vaccine composition according to ~~Claims 26 to 35~~ Claim 26, administered wherein the composition is administrable mucosally, parenterally, or through a combination of both methods.

49. (Currently Amended) The adjuvant according to ~~Claims 16 to 25~~ Claim 16, administered wherein the composition is administrable mucosally, parenterally, or through a combination of both methods.

50. (Currently Amended) The adjuvant according to ~~Claims 36 to 45~~ Claim 36, administered wherein the composition is administrable mucosally, parenterally, or through a combination of both methods.

51. (New) The vaccine composition of claim 1, further comprising at least one or more antigens.

52. (New) The vaccine composition of claim 51, further comprising an excipient.

53. (New) The method of claim 46, further comprising adding antigens or molecular structure associated to pathogens to the solution.

54. (New) The method of claim 53, following step (a) homogenizing at 0.2 to 2.7 μg for each 3 to 9 μg of protein for the antigens and from 1 to 30% of the protein concentration for the molecular structures.

55. (New) The method of claim 46, wherein the mechanical treating comprises sonication in a water bath at a temperature between 15°C and 25°C for a period of about 45 minutes.